Argued, Jany 2, 66 – W. Browne, Aff
Mr. Curtis (DR) Aff
Mr. Gushing (C) Aff
Chase & Davis not sitting – Abt 2 days in
Brethren

Jany 6 Aff'd Adjudicate

Read

SUPREME COURT OF THE UNITED STATES.

No. ~~104.~~ 90.

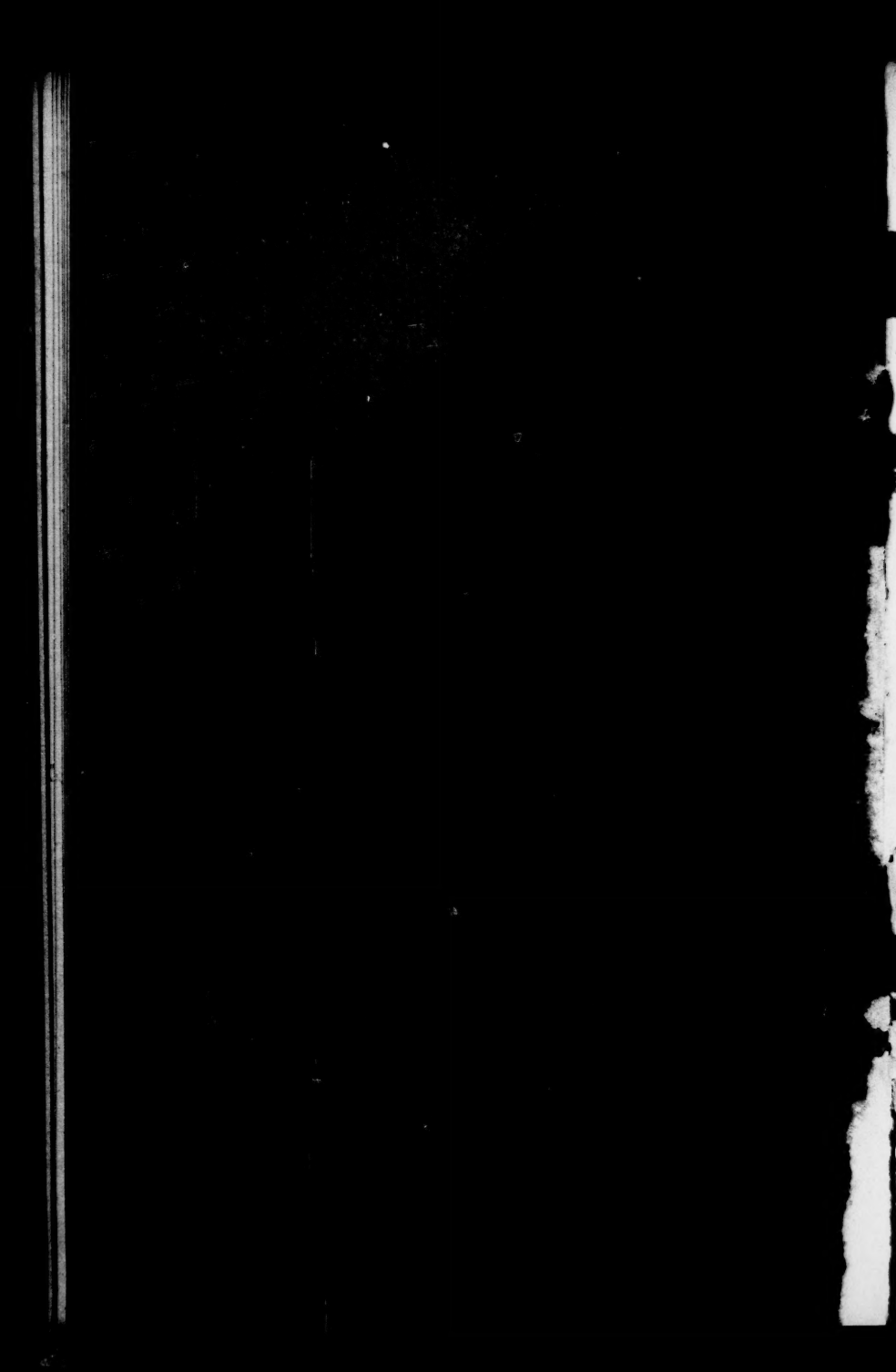
THE SUFFOLK MANUFACTURING COMPANY, PLAINTIFF IN ERROR,

vs.

ISAAC HAYDEN.

IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

GOVERNMENT PRINTING OFFICE.



SUPREME COURT OF THE UNITED STATES.

No. 164.

THE SUFFOLK MANUFACTURING COMPANY, PLAINTIFF IN ERROR,

vs.

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IN ERROR TO THE CIRCUIT COURT OF THE UNITED STATES FOR THE DISTRICT OF MASSACHUSETTS.

INDEX.

	Original.	Print.
Writ of error	1	1
Citation	3	1
Bond	5	2
Bill of complaint	7	3
Verdict	17	6
Judgment	17	6
Bill of exceptions	18	6
Clerk's certificate	32	10

1 UNITED STATES, *ss:*

L. S.] The President of the United States to the judges of the circuit court holden in and for the district of Massachusetts, greeting:

Because that in the record and process and also in the rendering of judgment in a suit before you, or some of you, between Isaac Hayden, of Roxbury, in the State of Massachusetts, plaintiff, and the Suffolk Manufacturing Company, a corporation established in said State at Lowell, defendants, in a plea of trespass on the case, a manifest error has intervened to the great damage of the said Suffolk Manufacturing Company, as in their complaint has been stated; and as it is just and proper that the error, if any there be, should be corrected in due manner, and that full and speedy justice should be done to the parties aforesaid in this behalf, you are hereby commanded that, if judgment thereof be given, then under your seal you do distinctly and openly send the record and process in the suit aforesaid, with all things concerning them, and this writ, so that you have the same before the chief justice and the associate justices of the Supreme Court of the United States, on the first Monday of December next, at Washington, being the present seat of the national government, that the record and process aforesaid being inspected, they may cause to be done thereupon what of right ought to be done.

Witness the honorable Roger B. Taney, esquire, Chief Justice of the said Supreme Court, at Washington aforesaid, this fourteenth day of January, in the year of our Lord one thousand eight hundred sixty-three, and of the independence of the United States the eighty-seventh.

H. W. FULLER, *Clerk.*

Allowed by—

P. SPRAGUE,
Judge U. S., Mass. Dist.

I have rec'd from the clerk a copy of this writ which was left for me by the adverse party.

ISAAC HAYDEN.

Jan. 15, 1863.

2 CIRCUIT COURT U. S.,
Massachusetts District, ss:

And now here the judges of the circuit court within named make return of this writ, by annexing hereto and sending herewith, as within commanded, under the seal of the said circuit court, a true and attested copy of the record and process in the suit within mentioned, and of all proceedings therein.

In testimony whereof, I, Henry W. Fuller, clerk of said circuit [L. S.] court, have hereunto set my hand and the seal of the said court this twenty-second day of February, 1863.

H. W. FULLER, *Clerk.*

3 United States of America, circuit court of the United States

MASSACHUSETTS DISTRICT, *ss:*

To Isaac Hayden, of Roxbury, in said district, greeting:

You are hereby cited and admonished to be and appear before the chief justice and associate justices of the Supreme Court of the United States, on the first Monday of December next, A. D. 1863, at Washington, the present seat of the national government, then and there to answer to a writ of error, this day sued out of the clerk's office of the said circuit court of the United States, wherein the Suffolk Manufacturing Company, a corporation established at Lowell, in the

State of Massachusetts, are plaintiffs in error, and you are defendant, to show cause, if any there be, why the judgment in said writ of error mentioned should not be corrected and speedy justice done to the parties in that behalf.

Witness the Hon. Roger B. Taney, Chief Justice of the Supreme Court of the United States, this fourteenth day of January, A. D. eighteen hundred and sixty-three.

P. SPRAGUE,
Judge of the U. S., Mass. District.

A true copy. Attest:

JOHN S. KEYES,
U. S. Marshal.

4 U. S. OF AMERICA,
Mass. Dist., ss:

BOSTON, *January* 24, 1863.

I hereby certify that I have cited the within-named Hayden to appear as within commanded, by giving him in hand the original citation, of which the within is a true and attested copy.

J. S. KEYES,
U. S. Marshal.

Service	$2 12
Copy	1 00
	3 12

5 Circuit court of the United States, October term, 1862.

DISTRICT OF MASSACHUSETTS, *ss:*

ISAAC HAYDEN
vs.
THE SUFFOLK MANUFACTURING COMPANY.

Know all men by these presents, that the Suffolk Manufacturing Co., as principal, and we, James W. Paige and Henry V. Ward, of Boston, as sureties, are holden and firmly bound unto Isaac Hayden in the sum of five thousand dollars, to be paid to the said Hayden, his heirs and assigns, to which payment, well and truly to be made, the said Suffolk Manufacturing Company binds itself and its successors jointly and severally with said sureties, their heirs, executors, and administrators; and we, the said sureties, bind ourselves, each of us, jointly and severally, and each of us, our heirs, executors, and administrators.

In witness whereof, the said Suffolk Manufacturing Company has caused its corporate seal to be hereunto affixed, and these presents to be signed by their treasurer, Henry V. Ward, thereto duly authorized; and the said Paige and Ward have hereunto set their hands and seals this 14th day of January, A. D. 1863.

6 Whereas the Suffolk Manufacturing Co. have sued out a writ of error, returnable to the Supreme Court of the United States, on the first Monday of December next, on a judgment rendered in the circuit court of the United States for the district of Massachusetts, wherein the said Suffolk Manufacturing Company are plaintiffs, and Isaac Hayden is defendant, now, therefore, the condition of this obligation is such that if the above-named Suffolk Manufacturing Company shall prosecute its said writ of error to effect, and answer all

damages and costs if it shall fail to make good the same, then this obligation shall be null and void; otherwise, remain in full force and effect.

HENRY V. WARD, [SEAL]
Treasurer Suffolk M'g Co.
J. W. PAIGE. [SEAL.]
HENRY V. WARD. [SEAL.]

In presence of—
H. W. FULLER.

C. C. U. S., MASS. DISTRICT, *January* 14, 1863.

Approved by the court. Attest:

H. W. FULLER, *Clerk.*

7 UNITED STATES OF AMERICA,
Massachusetts District, ss:

At a circuit court of the United States for the first circuit, begun and holden at Boston, within and for the district of Massachusetts, on Wednesday, the fifteenth day of October, in the year of our Lord one thousand eight hundred and sixty-two. Before the honorable Nathan Clifford, associate justice, and the honorable Peleg Sprague, district judge.

ISAAC HAYDEN, of Roxbury, in the district of Massachusetts, manufacturer, plaintiff,
vs.
THE SUFFOLK MANUFACTURING COMPANY, a corporation established by law at Lowell, in our district of Massachusetts, defendants.

In a plea of trespass in the case, for that the said Isaac Hayden was the original and first inventor of a certain new and useful "improvement
8 in long trunks for cleaning cotton," which is fully described in the letters patent hereafter mentioned, which improvement was not known or used before his invention thereof, and was not at the time of his application for letters patent therefor in public use, or on sale with his consent or allowance; and said Hayden was a citizen of the United States, and being such first inventor, did in due form of law make an application in writing to the Commissioner of Patents of the United States, for letters patent for his said invention, and duly signed in the presence of two witnesses, and sworn to and filed a specification and description in due, sufficient, and legal form of his invention for that purpose; and said Hayden filed all necessary drawings and models, and complied with all the conditions, requisitions of the statutes of the United States for such cases provided, and paid into the Patent Office a fee of thirty dollars; and said Hayden was by law entitled to and did in due form of law receive letters patent of the United States, dated December first, eighteen hundred and fifty-seven, which letters patent were sealed with the seal of the Patent Office, and were signed by Jacob Thompson, Secretary of the Interior, and countersigned by J. Holt, Commissioner of Patents, and were entitled of and for an
9 "improvement in long trunks for cleaning cotton," and in and by said letters patent there was granted and secured to the said Hayden, his heirs, administrators, and assigns, for the term of fourteen years from the date of said letters patent, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said improvement, a description whereof was given in the words of the said Hayden, in a schedule which was annexed to said letters patent, and was made a part of the same, as by said letters patent and schedule here in court to be produced will more fully appear. And the plaintiff says that the right so secured to him by said

letters patent was of great value, and that the letters patent were lawfully and rightfully issued to him; yet the defendants, though well knowing the premises aforesaid, but contriving and wrongfully intending to injure the said plaintiff in that behalf, and deprive him of the great advantages and profits which he might and otherwise would have obtained from said invention, did heretofore, to wit, on the first day of January last, at said Lowell, and on divers terms up to the date of this writ, wrongfully and without the license or consent of
10 the plaintiff, infringe upon and violate the exclusive right so as aforesaid granted to the plaintiff by making, constructing, and using the aforesaid improvement and invention of the plaintiff's, contrary to the form of the statutes in such cases provided, whereby the plaintiff has been greatly injured and deprived of great profits and advantages which he might and otherwise would have derived from said invention, and has sustained actual damages to the amount of twenty thousand dollars, whereby, and by force of the statutes in such cases provided, an action hath accrued to the plaintiff to have and recover of the defendants the said actual damage and such additional amount, not exceeding in all three times the amount of such actual damages, as the court may see fit to order and adjudge; yet the defendants, though requested, have not paid the same, but refuses so to do; also, for that the said Isaac Hayden, a citizen of the United States, was the first and original inventor and discoverer of a new and useful improvement in cotton-cleaners, as fully described and set forth in the letters patent hereinafter referred to, the same being a new and
11 useful improvement, and not known or used before his said invention and discovery, and was not at the time of his application for said letters patent therefor in public use or on sale, with his consent or allowance, and the said Hayden so being the first and original inventor of said improvement in due form of law made an application in writing to the Commissioner of Patents for the United States for letters patent for said improvement, and paid into the treasury of the United States the sum of thirty dollars as a patent fee, and in due form of law produced drawings, models, and specifications, describing his aforesaid invention, and in all other respects the said Hayden complied with the statutes of the United States in that behalf, and was legally entitled to receive letters patent for the improvement and invention aforesaid; and thereupon such proceedings were had, that on the eleventh day of September, in the year of our Lord eighteen hundred and sixty, letters patent of and for the United States of America, signed by Jacob Thompson, Secretary of the Interior, and countersigned by Philip F. Thomas, Commissioner of Patents, and sealed with the seal of the Patent Office of the United States, were in due form of
12 law issued to said Hayden, wherein and whereby the exclusive right of making, using, and vending to others to be used, the aforesaid invention and improvement in cotton-cleaners was granted and secured to him, the said Hayden, his heirs, administrators, and assigns, for the term of fourteen years, next after the date of said letters patent, as by said letters patent here in court to be produced will more fully appear.

And the plaintiff further saith that said invention and improvement so secured to him is of great value, to wit, of the value of one hundred thousand dollars, but that the defendants, wrongfully contriving and intending to injure the plaintiff, heretofore, to wit, on the first day of November, eighteen hundred and sixty, and at divers times before and since that day, have infringed upon the rights so secured to the plaintiff, and have used and are still using the improvement in cotton-cleaners described in said letters patent, and have made and used machines and machinery for cotton-cleaning, the same as therein described and claimed in said letters patent, and without any right or license, whereby they have deprived the plaintiff of the benefit and advantage of the said invention, and have prevented him from receiving the profits which he rightfully might and otherwise would have received in the premises, in violation of the

13 statutes of the United States in that behalf. And the plaintiff alleges that he has suffered actual damages to the sum of twenty thousand dollars, by means of which premises, and by force of the statutes aforesaid, an action has accrued to the plaintiff to have and recover of the said defendants the said actual damages, and such additional amount, not exceeding in the whole three times the amount of said actual damages, as the court may see fit to order and adjudge; to the damage of the said plaintiff, as he says, the sum of twenty thousand dollars.

This action was entered at the May term of this court, A. D. eighteen hundred and sixty-one, when the plaintiff appear by William Whiting, his attorney, and said defendants by Messrs. Brown & Maynadier, their attorneys; and at the same term, (to wit, September 14, 1861,) the following pleas and notice of defence are filed, namely:

And the said Suffolk Manufacturing Company, by its attorneys, comes and defends the wrong and injury, when, &c., and says that it is not guilty of the premises above laid to its charge in manner and form as the said Hayden hath above complained.

14 And of this said company puts itself upon the country.

BROWNE & MAYNADIER,
Defendants' Attorneys.

And the plaintiff doth the like.

By WILLIAM WHITING,
Attorney for Plaintiff.

The said Suffolk Manufacturing Company gives notice that upon the trial, in addition to all defences admissible under the plea of the general issue, it will give in evidence special matter tending to prove—

I. That the said Hayden was not the first inventor or discoverer of the things patented to him in the several letters patent declared on, or of a substantial and material part thereof claimed as new, but that the same was known to and used by the following named corporations and individuals at the following named places before the invention, if any, thereof, by the said Hayden; that is to say, known to the Suffolk Manufacturing Company, a corporation established by law of Massachusetts, and doing business at Lowell, in said State, and used by said company at its mills in said Lowell, John Wright, of said Lowell, being then its agent. Known to and used by William

15 Potter, of and at said Lowell. Known to and used by John Wright, of and at said Lowell.

Known to the Chicopee Manufacturing Company, a corporation established by law of Massachusetts, and doing business at Chicopee Falls, in the town of Chicopee, in said State, and used by said company at its mills in said Chicopee Falls, Ezekiel Blake, of said Chicopee Falls, being then its agent.

Known to and used by Ezekiel Blake, of and at Chicopee Falls, Massachusetts.

Known to the Amoskeag Manufacturing Company, a corporation established by law of New Hampshire, and doing business at Manchester, in said State, and used by said company at its mills in said Manchester, David Gilliss, of Nashua, N. H., being then its agent.

Known to and used by David Gilliss, of said Nashua, at Manchester, New Hampshire.

Known to the Salmon Falls Manufacturing Company, a corporation established by law of New Hampshire, and doing business at Salmon Falls, in said State, and used by said company at its mills in said Salmon Falls, Pliny Lawson, of Cleveland, Ohio, being then its agent.

Known to the Agawam Canal Company, a corporation established by

16 law of Massachusetts, and doing business at Mittineague, West Spring-

field, in said State, and used by said company at its mills at said Mittineague, Wills Southworth, of New Haven, Connecticut, being then its agent.

Known to and used by Gilman Jacquith, of Nashua, New Hampshire, at Manchester, New Hampshire, at Salmon Falls, New Hampshire, and at Mittineague, West Springfield, Massachusetts.

Known to and used by William Melcher, of and at said Mittineague.

II. That the things patented to the said Hayden in the several letters patent declared on were in public use with his, the said Haydon's, consent and allowance more than two years before his applications for patent therefor, respectively.

III. That the inventions patented in said several letters patent declared on were respectively, before the obtaining of said patents, abandoned to the public, and that said patents are void.

BROWN & MAYNADIER,
Defendants' Attorneys,

The case is thence continued from term to term to this present term, when the honorable Peleg Sprague, district judge, presiding, the said parties, re-
17 spectively appear, by their said attorneys, and by additional counsel, and by leave of court the plaintiff withdraws from the case the second count in his aforesaid declaration, (on the patent of 1860;) and issue having been joined as aforesaid on the first count in the said declaration, the cause, after a full hearing, is committed to a jury, sworn according to law, to try the same, who, after hearing all matters and things concerning the same, return their verdict, and upon oath say:

The jury find that the defendants are guilty in manner and form as the plaintiff has alleged against them in his writ, and assess damages for the plaintiff in the sum of seventeen hundred and seventy-four dollars.

DUNCAN BRADFORD, *Foreman.*

It is thereupon considered by the court (to wit, January 7, 1863) that said Isaac Hayden recover of said Suffolk Manufacturing Company the said sum of seventeen hundred and seventy-four dollars damages and his costs of suit taxed at .

Upon the trial of the above-entitled case, after the evidence was closed on both sides, and before the issue was submitted to the jury, the defendants
18 filed their bill of exceptions, which being found to be conformable to the truth, was signed and allowed by the court, under the hand and seal of the presiding judge, and is in the words and figures following, namely:

Defendants' exceptions.

U. S. circuit court, Massachusetts district, October term, 1862.

The plaintiff, to sustain the action upon the first count in his declaration, introduced letters patent, bearing date December 1st, 1857, a copy of which is hereto annexed, and marked Exhibit B, and to sustain the action upon the second count he introduced letters patent bearing, date September 11th, 1860, a copy of which is hereto annexed and marked Exhibit C, and also introduced evidence tending to show an infringement of both.

The defendants in the opening of their defence introduced a certified copy of letters patent issued to the plaintiff, and bearing date March seventeenth, one thousand eight hundred and fifty-seven, a copy of which is hereto annexed and marked exhibit A. It was agreed by the parties that these several letters patent were applied for in the following order:

19 Patent C, applied for Dec'r 11th, 1854.
Patent A, " " Nov. 1st, 1855.
Patent B, " " June 15th, 1857.

Evidence was introduced on both sides tending to show that prior to the alleged invention or inventions of the plaintiff, cotton had been cleaned by blowing it from an opening machine through long trunks of various lengths, from twenty to one hundred feet long, provided with a screen or grating, sometimes consisting of wooden bars, and sometimes of a plate of metal perforated with holes half an inch wide and two inches long; that some portion of the dirt and waste fibres, as well as some of the good fibres, of cotton fell through the openings in such screens or gratings, and descended into compartments below the screen, formed by cross partitions placed at varying distances, from three to five feet apart; but the plaintiff claimed and offered evidence tending to show that the improvement which he claimed effected the separation and retention of foreign substances and waste fibre more completely and successfully than the old trunks, and produced new results that had not been before produced, and thus produced the benefits and advantages set forth in his several specifica-
20 tions by means of the several improvements therein claimed.

And thereupon the defendants requested the court to rule upon the several letters patent A, B, and C, as follows:

First. That the patent of December 1st, 1857, (B,) covers an elongated trunk, having partitions covered by a woven wire screen whose crossings are filled with metal, cement, or shellac varnish, or any other varnish that will answer the purpose; such trunk to be used for the purpose of cleaning cotton in connexion with any opening and beating machine which can be made to produce either a blast or suction, with or without the aid of a fan, to assist in passing the cotton through the trunk over the screen.

Second. That the patent B is inoperative and void, because the thing therein described and claimed was fully described but not claimed in patent A, and was, therefore, by the legal operation of patent A, surrendered to public use, if it was the invention of the plaintiff before patent B was issued or applied for.

Third. That patent B is inoperative and void, because it describes and claims what is also embraced by the claim of patent C.

21 And the presiding judge, in accordance with the first prayer of the defendants' counsel, did rule upon the construction of the said patent B as follows, namely: That the patent of December 1st, 1857, (B,) covers an elongated trunk, having partitions covered by a woven wire screen, whose crossings are filled with metal, cement, or shellac varnish, or any other varnish that will answer the purpose; such trunk to be used for the purpose of cleaning cotton in connexion with any opening and beating machine which can be made to produce either a blast or suction, with or without the aid of a fan, to assist in passing the cotton through the trunk over the screen. But the presiding judge refused to rule the patent B to be inoperative and void, by reason of the legal effect of the patent A.

And the presiding judge further ruled that the patent of September 11th, 1860, (C,) embraces what was already covered by the patent of December 1st, 1857, (B,) but refused to rule that patent B is inoperative and void by reason of the legal effect of patent C. And thereupon the said patent C, after the evidence on both sides was closed, and before the case went to the jury, was with-
22 drawn from the case by the plaintiff's counsel, and the jury found a verdict for the plaintiff upon the patent of December 1st, 1857, (B.) To which rulings, so far as the court held the patent of December 1st, 1857, to be operative and valid, and to the refusal to hold the same inoperative and void, as prayed for by the defendants, the defendants, before the cause is submitted to the jury, respectfully except, and pray that their exceptions may be allowed and made part of the record thereof.

To show the damages sustained by the plaintiff by the wrongful use of his invention, the plaintiff called as witness one Henry K. Oliver, an experienced manufacturer, who testified that he was well acquainted with the plaintiff's im-

provement, and its uses and advantages, as compared with the former methods of cleaning cotton. And the plaintiff's counsel not having previously shown that the plaintiff confined the use of his improvement to his own business in manufacturing cotton, but stating, in answer to a question from the court, that the plaintiff had not a fixed or established price as a license fee for permitting the use of his improvement by others, and had not made any sales at any
23 fixed or agreed price, and admitting that he had granted the right to use the improvement in a limited manner, and for a specified purpose, experimentally, in one of the mills of which the witness Oliver was superintendent, propounded to the witness the following interrogatory:

"State the practical benefits, if any, of using Hayden's improvements in cotton-cleaning, as described in his patents, over and above the old machinery for cleaning cotton."

To this question the defendants' counsel objected, and assigned the following as grounds of objection: First, that the plaintiff not having shown how he exercises his rights under the monopoly of his patent, this question is not now competent to be put. Second, that the evidence sought by this question of the advantages, savings, or profits, resulting in the manufacture of cotton from the use of the plaintiff's improvement, as furnishing data from which the jury are to infer the actual damage sustained by the plaintiff, would be admissible only when the plaintiff had previously shown that he confined the use of the pretended improvement in the manufacture of cotton to his own business.

24 But the presiding judge overruled the objections, and allowed the question to be put, and thereupon the witness testified that the general results of using the plaintiff's improved trunk, as compared with the old machinery for cleaning cotton, were, in his experience, more thorough cleaning of the cotton; the saving of all the good fibres of the cotton, useful in manufacture; less damage to the staple in the act of cleaning; the freeing of the room from dust; the freeing of the machinery from dust, dirt, and sand; the keeping of the machinery in better order, and at less cost, and the dispensing with one grinder of the cards in consequence of the diminution of the amount of sand and dirt passed to the cards with the cotton, getting out fine dust and dirt that had never before been got out; that the yarns were made less liable to breakage, and that the operatives consequently had less annoyance in the manufacture; and an improvement in the quality of the cloth produced by reason of the less liability to breakage of the yarns, and knots to reconnect them. Also, that cotton could be purchased at one or one and a half cents per pound less,
25 and be cleaned in the plaintiff's trunk, so as to produce goods as valuable in the market as goods manufactured from cotton of the higher cost cleaned by the old machinery.

To which ruling the defendants excepted, and prayed that their exceptions might be allowed and made part of the record.

And thereupon, and in further proof of the damages sustained by the plaintiff, the plaintiff offered further evidence tending to show the same advantages resulting from the use of his improved trunk as had been testified to by the said Oliver, and for the purpose of showing the extent to which the plaintiff's improvement had been used by the defendants, proved the amount of cotton that had been cleaned at the defendants' mills during the time covered by his writ, in the four trunks used by them, and complained of as infringements of his patent.

To which evidence the defendants objected, but the presiding judge overruled the objection, and admitted the evidence to go to the jury on the question of damages.

To which ruling, and to the admission of said evidence, the defendants,
26 before the case is submitted to the jury, respectfully except, and pray that their exceptions may be allowed and made part of the record thereof.

And thereupon the defendants, in answer to the claim for damages founded on the foregoing evidence, introduced testimony tending to show what compensation the plaintiff had received from two manufacturing companies, (of one of which the said witness Oliver was the agent,) for permission to use his patented improvement. The evidence was that the plaintiff, for the purpose of experiment, allowed Oliver to test the applicability of his improvement to cleaning of cotton for fine goods, and its results upon the general process of manufacturing therein, Oliver being at liberty to give it up after trying the experiment, without compensation, or retain the use of it in one mill only, if he and Mr. Hayden could agree upon the terms, the price, if fixed, not to be deemed as the price for any other mills. A similar arrangement was made with the agent of the other company, a part of the consideration of the agreements being that the improvement would be thus introduced into public notice, Mr. Hayden having the
27 right to bring other persons to those factories to exhibit the operation of his invention.

After using the improvement for some time both companies wished to retain it, and Mr. Hayden said that under the peculiar circumstances of these cases he would allow the two agents to say what they would pay; and they, in consultation with Mr. Thacher, who was either a referee or a party consulted, fixed upon a price, which they paid to him; but Mr. Hayden was dissatisfied with the amount, and requested them to keep it secret, as he was not willing to have other parties use his improvement at the same rate.

The defendants also showed that the plaintiff had permitted the use of his machine by a third manufacturer, with the statement that there would be no difficulty in agreeing upon the compensation if this manufacturer found it successful and wished to continue its use. There was a difficulty, however, which ended in a lawsuit that was subsequently compromised between the parties, but what that compromise was did not appear at the trial. Thereupon, and
28 upon all the other evidence in the case, the defendants' counsel prayed the court to instruct the jury on the subject of damages as follows:

First. That if the jury are satisfied, from the evidence in the case, that the plaintiff had at the date of the writ any fixed or average price for a license to use his pretended improvements, that fixed or average price is the measure of damages to be applied to this case.

Second. That if the jury cannot find a fixed or average price, they are to give as damages, not the profits made by the defendants from the use of the machine, or any percentage on those profits, but only the loss which the plaintiff has sustained in being deprived of an opportunity of agreeing with the defendants on a voluntary sale; and in estimating that loss, the jury are to judge of its amount by the dealings of the plaintiff with other manufacturers to whom he has granted the right to use his patented improvements.

But the presiding judge refused to give the instructions prayed for, and instructed the jury as follows: The general rule is that you should give to
29 the plaintiff the actual damage he has sustained by his invention having been used by the defendants. You will look at the length of time, in the first place, that the defendants have used the trunks. Here it is material to bear in mind that your verdict covers only the use from June, 1858, up to the date of the writ in April, 1861. If the defendants have used the machine since that time, they are liable (over and above what you will give in your verdict) to pay the plaintiff for such use since. Your verdict will cover no use except up to the date of the writ. That is all which is sued for. For all since that time the defendants are liable in another suit by the plaintiff. You are also to remember that if you render a verdict for the plaintiff, it will not give to the defendants any right to use any of these trunks hereafter. It is not like a license to use a trunk during the existence of the patent; so far from conferring

any right to use them hereafter, the plaintiff may apply to this court for an injunction; that is, for an order of court to prevent their using them. Such will be his right if the patent be established. You to give the actual
30 damages which the plaintiff has sustained for the use of his patented improvement from June, 1858, to the date of the writ. You have heard from the counsel various means of ascertaining the damages. You are to take the whole evidence, so far as it is applicable to that question, into view, and form your judgment from the whole. There is some evidence derived from General Oliver and Mr. Southworth, of the use by the Atlantic company in Lawrence, and the company over which Mr. Southworth presided in Lowell, of this machine of Mr. Hayden, by his consent, under particular circumstances, and its being subsequently referred to them in connexion with Mr. Thacher, to determine what compensation should be paid. I understand that this was a compensation for the use of it as a license during the existence of the patent, and not merely for the past time; and they fixed upon a certain compensation, which was named to you by General Oliver. That was not satisfactory to Mr. Hayden, and is not to be taken as price which he fixes, or an agreement that it was a fair compensation for a license, even under the circumstances under
31 which they began to use it. But as that is evidence in the case, you will take it into view, and give it such weight as it deserves, in ascertaining the actual amount of the damage sustained by the plaintiff; then you will look at the value of the thing used, and ascertain that value by all the evidence, as to its character, operation, and effects. You will take into view the value of that which the defendants have used, belonging to the plaintiff, to aid you in forming a judgment of the actual damage the plaintiff has sustained.

To which refusal and instructions the defendants, before the cause is submitted to the jury, respectfully except, and pray that their exceptions may be allowed and made part of the record thereof.

And the foregoing exceptions being severally found conformable to the truth are hereby allowed, under my hand and seal.

P. SPRAGUE, [SEAL.]
Judge of the United States, Massachusetts District.

A true record. Attest:

H. W. FULLER, *Clerk.*

32 UNITED STATES OF AMERICA,
Massachusetts District, ss:

I, Henry W. Fuller, clerk of the circuit court of the United States for the first circuit, Massachusetts district, do hereby certify that the foregoing is a true copy of the record and of all proceedings in the cause of Isaac Hayden *vs.* The Suffolk Manufacturing Company, in this court determined.

In testimony whereof, I have hereunto subscribed my name and affixed the seal of said court, at Boston, in said district, this twenty-third day of
[SEAL.] February, in the year of our Lord one thousand eight hundred and sixty-three, and of the independece of the United States the eighty-seventh.

H. W. FULLER, *Clerk.*

Filed 4th Dec'r, 1863.

65
2

SUPREME COURT OF THE UNITED STATES.

No. ~~101.~~ 90.

THE SUFFOLK MANUFACTURING COMPANY, PLAINTIFF IN ERROR,

vs.

ISAAC HAYDEN.

ADDITION TO RECORD.

GOVERNMENT PRINTING OFFICE.

No. 16833.]

1 The United States of America to all to whom these letters patent shall come: Whereas Isaac Hayden, of Lawrence, Mass., has alleged that he has invented a new and useful improvement in machinery for cleaning and separating cotton, wool, fur, and other fibrous materials, which he states has not been known or used before his application; has made oath that he is a citizen of the United States, that he does verily believe that he is the original and first inventor or discoverer of the said improvement, and that the same hath not, to the best of his knowledge and belief, been previously known or used; has paid into the treasury of the United States the sum of thirty dollars, and presented a petition to the Commissioner of Patents signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose: these are therefore to grant, according to law, to the said Isaac Hayden, his heirs, administrators, or assigns, for the term of fourteen years from the seventeenth day of March, one thousand eight hundred and fifty-seven, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used the said improvement, a description whereof is given in the words of the said Hayden in the schedule hereunto annexed, and is made part of these presents.

In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

Given under my hand at the city of Washington, this seventeenth day of March, in the year of our Lord one thousand eight hundred and fifty-seven, and of the independence of the United States of America the eighty-first.

[SEAL.] JACOB THOMPSON,
Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.

C. MASON, *Commissioner of Patents.*

2 *The schedule referred to in these letters patent, and making part of the same.*

To all whom it may concern: Be it known that I, Isaac Hayden, of Lawrence, in the county of Essex and State of Massachusetts, have invented a new and useful apparatus to be applied to machines for cleaning and separating wool, cotton, fur, and other fibrous substances, and I do hereby declare that the same is described and represented in the following specifications and drawings.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction, use and operation, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Fig. 1 is a plan of my invention, with one half of the top removed to show the screen.

Fig. 2 is a sectional elevation, representing Fig. 1 cut though the line A B.

The design and object of my apparatus, when applied to machines for cleaning cotton and other fibrous substances, is to make the machine clean the cotton more perfectly, by blowing or drawing it, when separated, into very small flakes, or loose, open locks, through a long trunk provided with numerous cross-partitions on its bottom. These partitions, and the spaces between them, being covered with a wove wire screen or net, with open meshes, large enough to allow the blast of air blown through the trunk to circulate freely through them, but so small that only the short fibres of cotton will be blown through, while the dirt, dust, sand, and other refuse matter

mixed with the cotton, which are heavier than the cotton, will fall through the meshes in the wove wire screen, and remain between the parti-
3 tions until they are removed, while the cotton is blown through the trunk, over the screen. After precipitating all extraneous matter which was mixed with it through the screen, it passes out of the trunk into the receptacle or devices prepared to receive it, being far better cleaned than it has ever been done before by any machine heretofore known.

The area of the trunk above the screen may be increased by making it larger towards its rear, and by gradually increasing its height or width, or both, so that the blast of air which conveys the materials through the trunk will move gradually slower, so as to allow the light and fine, or such portions of the materials as are intended to be separated, time to be precipitated and fall through the screen before the current of air which holds them in suspension escapes from or passes out of the trunk Some portion of the trunk may be covered with sheet metal or other baths, supplied with cold water, so as to cool the upper stratum of air, to make it heavier, and induce it to descend into the lower part of the trunk, between the partitions, where there will be less motion than above the screen, so as to precipitate or allow the substances held in suspension time to fall and deposit themselves in the spaces under the screen.

The partitions in the trunk may be made wider, so as to make the spaces between them gradually deeper towards the rear end of the trunk, so that there will be less motion under the screen at that end, so as to allow the finer or finest portions of the materials held in suspension time to precipitate and deposit themselves.

In order to prevent the fibres of cotton or other substances blown through the trunk from catching and hanging in the scores in the wove-wire screen formed by the weft in crossing the warp, or at the junction of the
4 warp and weft, I fill these scores with melted metal, varnish, or some kind of cement, so as to allow the fibres of the substance cleaned or operated upon to pass freely over the screen, and save them from being caught in the scores, as they would most certainly be if the scores were not filled with some material to prevent them.

In the above-mentioned drawings a a are the sides of a long trunk connected together by a series of cross partitions, c c, about one half the width of the sides, placed about six inches apart, with their lower edges even with the lower edges of the sides, as represented in Fig. 2.

There is a rebate a^1, a^1, on the inside of both edges of the sides, a a, to which the top and bottom of the trunk is fitted. The bottom pieces, f f, are made just wide enough to fill the spaces between the partitions, c c, as represented in Fig. 2, and are secured in their places by the buttons, g g, fastened to the sides, a a.

The top, h h, may be made in sections, and fitted to the rebates, a^1 a^1, and fastened down by the buttons, a^2 a^2, which are fastened to the sides, as represented. The wove wire screen, b b, is made of wire about number twenty-two, woven so that the centre of the wires are about one eighth of an inch apart in each direction; and to prevent the fibres of cotton or other substances from catching and hanging in the scores in the wove wire formed by the weft crossing the warp, or at the junction of the warp and weft, I fill them with melted metal by dipping the wove wire into melted metal, either tin or a composition of tin and lead, or instead of dipping the wove wire into molten metal, it may be covered with a varnish made by dissolving gum shellac in alcohol, and applying it with a brush upon one or both sides; if only one side, the top should be varnished, and the wire placed in a horizontal
5 position when it is varnished, and allowed to remain in that position until it is dry. It should be brushed crosswise in applying the first

coat of varnish, and when that is dry the second coat should be applied by brushing it lengthwise, so as to fill the scores in each direction. Instead of the varnish or melted metal mentioned, any other kind of varnish or cement which will answer the purpose may be used to fill the scores; or, instead of the wove wire, a screen made of twine might be prepared with varnish so as to answer the purpose, if for any cause it should be preferred. This screen of wove wire is fastened to the tops of the partitions, c c, so as to entirely cover the space between the sides, a a; and some smooth cleats, k k, should be fastened to the sides, over the screen, to fill the corners formed by the screen and the sides, a a, so as to prevent the fibres from catching and hanging in the corners.

If it is found necessary or desirable, some deflecting cleats, e e, may be fastened on the top of the screen and on the under side of the top of the trunk, as represented at Fig. 2, to deflect the blast as it passes through the trunk. The rear end or part of the trunk is made wider and higher, as represented in the drawings, so as to increase its area and reduce the blast by allowing it to expand, so that it will move slower, and allow the light and fine, or such portions of the materials as are intended to be separated, time to be precipitated and pass through the screen before the air
6 which holds them in suspension passes out of the trunk. The partitions, c c, are made wider towards the rear end of the trunk, so as to make the spaces between them deeper, so that there will be less motion to the air under the screen, where they are deeper, to allow the substances in suspension time to precipitate and deposit themselves between the partitions.

The curved form of the wire in the screen presents a very different surface to the flowing current of air from that presented by perforated sheet metal; besides, there is far more open space in a given area than if perforated metal or other substances were used, affording greater facility for the sand, dirt, or other substances intended to be separated, to pass through the screen.

In cleaning cotton, the fibre which is long enough to reach across more than two spaces or meshes in the screen is carried forward over it, but that which is shorter than two meshes is carried through the screen and deposited in the spaces between the partitions. This apparatus separates the dust from the cotton so perfectly and completely, that there is far less dust evolved from it (the cotton) in passing it through the subsequent processes of manufacture. Besides, the goods manufactured from cotton cleaned in this apparatus present an appearance so much superior to others as to increase their market value from five to eight per cent., and at the same time the cotton is worked with far less loss in waste than heretofore; so that it enables the manufacturer to make goods of a given quality out of a far cheaper and inferior quality of raw material than he could do without it. And in addition
7 to the advantages already enumerated, the cards working cotton cleaned in this apparatus will not require more than two thirds as much grinding as others; so that one third of the labor and expense of grinding the cards is saved and one third or more of the wear and tear of the card clothing also.

I contemplate that this apparatus may be used in working wool, and in separating the hair from the fur for making hats, by graduating the blast so as to allow the hair to fall through the screen while the fine fur would be carried over it. And it is believed it can also be used to great advantage in machines for cleaning and dressing feathers, hair, and other fibrous substances.

In using this apparatus, it is intended to apply it to such machines for beating, picking, scutching, and opening cotton, wool, fur, and other

fibrous substances, as can be made to produce either a blast or suction, with or without the aid of a fan to assist in passing the substances to be operated upon through the machine or apparatus. The wire used for making the screen and the meshes formed in it, may be made of such dimensions as will adapt it to the purposes for which it is intended to be used. And the trunk may be made air tight or as nearly so as may be necessary for the purpose for which it is intended to be used.

I believe my invention may be advantageously used in the manufacture of lamp black, zinc white, and in collecting the products of sublimation of some other substances.

I believe I have described the construction, operation, and use of
8 the apparatus which I have invented, so as to enable any person skilled in the art to make and use the same; also some of the several uses to which it may be applied.

I will now specify what I desire to secure by letters patent:

1st. I claim increasing the area of the trunk above the screen or making it larger towards its rear end by increasing its height, or width, or both, as may be desirable, so that the blast of air which conveys the materials into or through the trunk will move gradually slower, so as to allow the light and fine, or such portions as are intended to be separated, time to be precipitated and pass through the screen before the air which holds them in suspension escapes from or passes out of the trunk.

2nd. And, in combination with a trunk made gradually larger towards its rear end, as above claimed, I claim a screen of woven wire or twine, arranged upon a series of partitions substantially as described for the purposes set forth.

ISAAC HAYDEN.

Witnesses:

JOHN S. HOLLINGSHEAD.
SAM'L GRUBB.
J. DENNIS, Jr.

[Here follows diagram, marked "Exhibit A."]

No. 18742.]

9 The United States of America to all to whom these letters patent shall come:

Whereas Isaac Hayden, of Lawrence, Mass., has alleged that he has invented a new and useful improvement in long trunks for cleaning cotton, which he states has not been known or used before his application; has made oath that he is a citizen of the United States, that he does verily believe that he is the original and first inventor or discoverer of the said improvement, and that the same hath not, to the best of his knowledge and belief, been previously known or used; has paid into the treasury of the United States the sum of thirty dollars, and presented a petition to the Commissioner of Patents signifying a desire of obtaining an exclusive property in the said improvement, and praying that a patent may be granted for that purpose:

These are therefore to grant, according to law, to the said Isaac Hayden, his heirs, administrators, or assigns, for the term of fourteen years from the first day of December, one thousand eight hundred and fifty-seven, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the words of the said Isaac Hayden in the schedule hereunto annexed, and is made part of these presents.

In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

Given under my hand at the city of Washington, this first day of December, in the year of our Lord one thousand eight hundred and fifty-seven, and of the independence of the United States of America the eighty-second.

[L. S.]

JACOB THOMPSON,
Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.

J. HOLT,
Commissioner of Patents.

The schedule referred to in these letters patent and making part of the same.

To all whom it may concern: Be it known that I, Isaac Hayden, of Lawrence, in the county of Essex, and State of Massachusetts, have invented a new and useful improvement in elongated trunks for cleaning cotton, and other fibrous substances, and for separating hair from fur, and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improvement, I will proceed to describe its construction and use, referring to the drawings, in which the same letters indicate like parts in each of the figures.

Fig. 1 is a plan of an elongated trunk with my improvements, the top casing being omitted.

Fig. 2 is a sectional elevation of the same through the line A B of Fig. 1, the top casing being supplied *or* as shown.

The nature of my invention and improvement in elongated trunks for cleaning cotton, and other purposes, consists in covering the bottom, or partitions on the bottom, with a woven screen, which has the scores formed by the warp crossing the weft, or at the junction of the warp and weft, filled with metal, or some kind of cement, so as to prevent the fibres of cotton, or other materials, being passed over the screen, from catching and hanging in said scores.

In the accompanying drawings the sides of a trunk are shown at a a, connected together by cross partitions c c, about one half the height
11 of the sides; between the lower edges of these partitions there are doors f f, which form the bottom of the trunk, and are held in their places by the buttons g g, so that they may be easily taken out to remove the waste and refuse matter that collects upon them. The top of the trunk is also covered with doors h h, fastened by the buttons i i, as shown in the drawing, j j rebates in the tops of the sides for the ends of the doors h h.

The woven screen b b, is fastened over or on the top edges of the partitions c c, by means of cleats c^1 c^1, fastened to the sides a a, or otherwise. This woven screen b may be made of wire or twine; but the best screens for cleaning cotton, so far as I have tried them, are made of wire, about number twenty-two, woven square, about one eighth of an inch from centre to centre of the wires, or eight wires to the inch each way. To prevent the fibres of cotton, or other material blown over the screen, from catching and hanging in the scores between the wires formed by the warp crossing the weft, or at the junction of the warp and weft, I fill said scores with melted metal by dipping the woven wire into it; the metal used may be tin, or a composition of tin and lead. This woven screen may have the scores in it filled with varnish, made by dissolving gum shellac in alcohol, and applying it with a brush upon one or both sides; if only one side it should be the top.

The screen being placed in a horizontal position when it is varnished, and allowed to remain in that position until it is dry. It should be brushed crosswise in applying the first coat of varnish, and lengthwise in the second; so as to fill all the scores in each direction with varnish. Instead
12 of the varnish mentioned, some other kind of varnish or cement which will answer the purpose may be used.

The partitions c c may be placed about six inches apart, and if necessary or desirable, some deflecting cleats e e may be fastened on the screen over each alternate partition; and there may also be some deflecting cleats fastened to the under side of the top, midway between the deflecting cleats on the screen, so as to give the blast blown through the trunk a serpentine or undulating motion.

A trunk with my improvements may be applied to such machines for beating, picking, scutching, and opening cotton, wool, fur, and other fibrous substances as can be made to produce either a blast or suction, with or without the aid of a fan, to assist in passing the substances operated on through the trunk over the screen. When cotton or other fibrous substances are blown over the screen the fibres which are too short to reach across two meshes in the screen pass through it and remain in the space d d, between the partitions c c, while the longer fibre is blown over it, and passes out of the trunk.

As the cotton is blown through the trunk it is separated into small flakes. Most of the sand, dirt, dust, pieces of leaves, and other refuse matter heavier than the cotton, is precipitated from it, and passes through the screen, remaining in the spaces between the partitions, where there is comparatively little motion to the air; and all the substances above mentioned deposit themselves on the bottom of the trunk between the partitions, where
13 they remain until they are removed by taking out the bottom This screen separates the dust from the cotton so perfectly and completely that there is far less dust evolved from it (the cotton) in passing through the subsequent processes of its manufacture. Besides, the goods manufactured from cotton cleaned in this apparatus present an appearance so much superior to others, as to increase their market value from five to eight per cent.; and at the same time the cotton is worked with far less loss in waste than if it was manufactured without this apparatus. And further, it enables the manufacturer to make goods of a given quality out of a far cheaper and inferior quality of raw material than he could do without it.

And in addition to these advantages, the cards working cotton cleaned in this apparatus will not require more than two thirds as much grinding as others, so that one-third of the expense and labor of grinding the cards is saved; and also one-third or more of the wear and tear of the card clothing. The wire or twine used in making the screen and the meshes formed in it may be of such dimensions as will adapt it to the purposes for which it is intended to be used. I contemplate that a trunk with my improvements may be used to great advantage in separating hair from fur, to make hats, by graduating the blast so as to allow the hair to fall through the screen, while the fine fur is carried over it; and that it can also be used in machines for cleaning and dressing feathers.

14 This apparatus not only separates the dirt, dust, and refuse matter heavier than the cotton from the cotton, but it also separates the short staple from the long. The short staple or fibres pass through the screen, while the long staple or fibres are blown over it.

I believe I have described and represented the construction and use of the improvement which I have invented, so as to enable any person skilled in the art to make and use it; also, some of the uses to which it may be applied. I will now specify what I desire to secure by letters patent, to wit:

I claim covering the partitions of an elongated trunk or box for cleaning cotton and other fibrous substances with woven wire, having the scores formed by the weft crossing the warp of said wire screen, filled with metal or cement, the whole combined in the manner and for the purposes set forth in the foregoing specification.

ISAAC HAYDEN.

Witnesses : GIDEON WILKINS.
ROBERT CROSS.

[Here follows diagram, marked Exhibit B.]

No. 29971.]

15 The United States of America to all whom these letters patent shall come :

Whereas Isaac Hayden, of Lawrence, Massachusetts, has alledged that he has invented a new and useful improvement in cotton cleaners, which he states has not been known or used before his application ; has made oath that he is a citizen of the United States, that he does verily believe that he is the original and first inventor or discoverer of the said improvement, and that the same hath not, to the best of his knowledge and belief, been previously known or used ; has paid into the treasury of the United States the sum of thirty dollars, and presented a petition to the Commissioner of Patents, signifying a desire of obtaining an exclusive property in the said improvment, and praying that a patent may be granted for that purpose:

These are therefore to grant, according to law, to the said Isaac Hayden, his heirs, administrators, or assigns, for the term of fourteen years from the eleventh day of September, one thousand eight hundred and sixty, the full and exclusive right and liberty of making, constructing, using, and vending to others to be used, the said improvement, a description whereof is given in the words of the said Isaac Hayden, in the schedule hereunto annexed, and is made part of these presents.

In testimony whereof, I have caused these letters to be made patent, and the seal of the Patent Office has been hereunto affixed.

Given under my hand at the city of Washington, this eleventh day of [L. S.] September, in the year of our Lord one thousand eight hundred and sixty, and of the independence of the United States of America the eighty-fifth.

JACOB THOMPSON,
Secretary of the Interior.

Countersigned and sealed with the seal of the Patent Office.

PHILIP F. THOMAS,
Commissioner of Patents.

16 *The schedule referred to in these letters patent, and making part of the same.*

To all all whom it may concern :

Be it known that I, Isaac Hayden, of Lawrence, in the county of Essex, and State of Massachusetts, have invented certain new and useful improvements in apparatus or machinery for cleaning cotton and other fibrous substances, and I do hereby declare that the same is described and represented in the following specifications and drawings.

In describing my improvements in machinery, or apparatus for cleaning cotton and other substances, I propose first to state briefly what was used previous to the date of my invention, to wit.

Machines have long been in use for cleaning and opening cotton, consisting of an endless band, carried by two rotating cylinders, and arranged to supply the cotton to a pair of fluted rollers, which rollers feed the cotton to a beater, or scutcher made to turn with great volocity to open the cotton and blow it into a trunk about three feet wide and one foot deep, and from twenty to sixty or one hundred feet in length ; which trunk was divided near the middle horizontally by a grate of wooden bars placed crosswise ; which bars were about three quarters of an inch in diameter, with spaces between them about one fourth of an inch in width, the cotton being blown over this grating, as it is opened by the scutcher, by the blast of the scutcher; and to check the blast under the grating there were partitions placed crosswise about four feet apart. This grating was found very defective, for the following reasons, to wit : the spaces between the bars being about three feet long and one fourth of an inch wide, the long staple of the cotton passed between the bars, with the short in locks of considerable size, so that much good cotton passed through though the bars as waste ; and a
17 still greater defect was, the partitions under the bars of grating were so far apart that the blast under the grating was so near, as strong as it was above the grate, that nearly all the fine sand, and dirt, and dust, and refuse matter that passed down through the grate was carried up through it back again, and so carried forward out of the trunk with the cotton ; and although the cotton was opened, and the fine sand, dust, dirt, and refuse matter were released, so as to be readily separated from the cotton, this grating of wooden bars failed to effect the separation, as the sand, dust, dirt, and refuse matter did not remain in the trunk in any considerable quantity, but were carried out by the blast with the cotton.

As this grate of bars failed almost entirely to separate the sand, dirt, dust, and refuse matter from the cotton, perforated metal plate was tried as a substitute; that is, sheet zinc was perforated with holes about one half an inch wide, and about two inches long, with partitions placed vertically crosswise under the perforated zinc, about four feet apart. This proved no better than the grate of wooden bars; besides, the area of the surface occupied by the wooden bars and zinc plate was three times as large as the perforations or openings in the grate, which was one cause of the failure of these devices. Another cause was, the openings were too large; that is, they were much longer than the length of the staple of cotton; and the third cause of its failure was, the partitions were so far apart that they did not arrest the current of air, or blast of air, under the grate or perforated metal, so as to retain the sand, dirt, dust, and refuse matter that passed down, so as to prevent it from being carried up back again and out of the trunk with the cotton.

The object and design of my improvement is to remedy the defects above mentioned and pointed out, by using, instead of the wooden bars or perforated metal plate, a reticulated screen of woven wire or twine with meshes so small that the staple or fibre of cotton long enough to be of any value in making yarn will reach across two of said meshes or open-
18 ings, and therefore remain above the screen, while that portion or some of that portion of the fibre which is too short to reach across two of the meshes or openings falls through the screen with the fine sand, dirt, dust, and refuse matter heavier than the cotton. And to break the blast or current of air under the screen so effectually that it will not carry much of the fine sand, dirt, dust, and short fibre up back again through the screen, so as to be carried out of the trunk with the cotton, I place the vertical partitions across the trunk under the screen, so near together as to stop or prevent any or sufficient blast or current under the screen to bring much of the matter up back through the screen again, but retain what passes

through the screen, or most of it, in the small cells formed under the screen by placing the partitions but a little distance apart.

Another very important advantage gained by the use of the wire screen is that the wire occupies less than one fourth of the area of the space covered by the screen; therefore it leaves more than three fourths of the area in open meshes or spaces between the wires, so that the dirt, dust, and refuse matter has three times as much area or open space in the screen of woven wire to fall through and be separated from the cotton as it had when blown over the grate of wooden bars or the perforated zinc plate; consequently there is as much dirt, dust, etc., separated or screened from the cotton in passing one foot over the screen as there would be in passing over four feet of the grate of bars or perforated zinc. The nature of my invention and improvements in machinery or apparatus for cleaning cotton and other substances consists in dividing the trunks used for that purpose centrally and horizontally by a reticulated screen of woven wire or twine with cells or compartments under said screen formed so small by vertical partitions placed crosswise of the trunk, so near together as to break the blast or current of air, or so far prevent any current or blast from being formed under said screen that will carry much of the dust, dirt, or refuse matter which falls through the screen up, back again through said screen, but retain such dirt, dust, and refuse matter in the cells under the screen until it is removed by opening the bottom of the trunk.

To enable others skilled in the art of making and using machinery for working cotton and other fibrous substances I will proceed to describe the construction and operation of the improvements which I have invented, referring to the accompanying drawings in which the same letters of reference indicate like parts in each of the figures Fig. 1 is a plan or top view of a trunk with my improvements; the top of the trunk is omitted to show the screen. Fig. 2 is a sectional elevation through the line A B of Fig. 1 with the top shown in place. Fig. 3 is an elevation of a machine, such as are in common use for picking cotton, drawn on a scale of $\frac{3}{4}$ths of an inch to the foot. Fig. 4 is a cross section of a trunk with the wire screen on a scale of six inches to the foot. Fig. 5 is a portion of a screen drawn full size.

In the above-mentioned drawings a strong frame is represented at C, provided with a beater or scutcher arranged to turn in proper boxes mounted on the frame C, which beater is covered by a semicircular case D on the top, the ends of which case may have openings near the centres to admit air to the beater. There is a case under the beater, as shown by the dotted line E, extending to the end of the trunk which conveys the cotton away from the machine. To supply the cotton to the beater the frame F is connected to the frame C, as shown in the drawing, and provided with two cylindrical rollers, one of which is shown at G, which rollers carry an endless band or apron on which the cotton is spread, and as the top of the apron moves forward towards the rollers H, these rollers take it between them as they are rotated, and deliver it to the beater, which knocks or beats it in small locks as the beater is turned rapidly in the direction indicated by the arrow, and blows or delivers the locks of cotton into the trunk attached to the rear of the machine.

There is an open space between the rollers H and the end of the bottom case E, through which space the heavy seeds are knocked when struck by the beater, and separated from the cotton; and the air also rushes or is drawn in through this open space, and is blown or forced by the beater through the trunk, carrying the cotton with it. The beater may be turned by a pulley and band, and the rollers G and H by gearing, and float boards

[Rec. cl. xii, p. 7 1864.]

may be applied to the arms of the beater to increase the blast through the trunk if necessary. As the feeding apron, rollers, and beater are all well known, and have long been used, a further description is deemed unnecessary, and I will now proceed to describe the trunk connected to the rear of the machine, with my improvements.

This trunk consists of two sides *a a*, which may be placed about thirty inches apart, and connected together by partitions *c c*, placed about five inches apart, and made to extend from the lower edge of the sides up to the middle. The bottom of this trunk is closed by small doors, *f f*, held in place by the buttons *g g*, so that the partitions with their bottoms form a series of small cells, or compartments *d d*, in the lower half of the trunk, which cells are covered by a screen *b* of woven wire or twine, extending across the trunk from side to side, and supported by the tops of the partitions *c c*. The screen *b* may be secured to the sides *a a* by cleats e^1 e^1, so as to hold it in place on the tops of the partitions. The upper edges of the sides *a a* are provided with a rebate *j j* to receive the edges of the top *h h*, which may be made in sections so as to be easily and readily removed and replaced, and it is
21 held down by the buttons *i i*. If it is desirable to agitate the blast of air which carries the cotton through the trunk, some deflecting cleats *e e* may be fastened alternately on the top of the screen over the partitions and to the underside of the top, as shown in the drawings. I have found in practice that these trunks work well when the height of the space above the screen was six inches, and the cell six inches deep under the screen, and that wire about number twenty, woven so as to make about twenty-five or thirty meshes or openings in a square inch of surface. These screens should be made of smooth wire, and to prevent the fibres of cotton or other substances from catching and hanging in the scores in the woven wire, formed by the weft crossing the warp, or at the junction of the warp and weft, I fill them with a varnish made by dissolving gum shellac in alcohol, and applying it with a brush upon one or both sides of the wove wire; if only one side the top is varnished. The wire should be placed in a horizontal position when it is varnished and allowed to remain in that position until it is dry. It should be brushed crosswise in applying the first coat of varnish, and when that is dry the second coat should be applied by brushing it lengthwise, so as to fill the scores in each direction. I contemplate that there are some other kinds of varnish that will answer the purpose to fill the scores, and prevent the cotton or substance blown over the screen from catching and hanging in the scores above mentioned. The rear end of the trunk may be arranged to deliver the cotton into a room provided with screens to retain the cotton and let the air escape ; or it may be so arranged as to deliver the cotton to a rotary screen to form the lap, if preferred.

In carding, drawing, roving, and spinning most cotton there is a great deal of staple so short that it flies off or falls from the longer staple in the processes mentioned, so that it has to be frequently gathered up or wiped
22 from the machinery to prevent it from obstructing the proper operation of the machinery. Now I have found that in blowing cotton through the trunk over the woven screen that a large portion of the fibre that is too short to reach across two of the meshes falls through the screen, and remains below it to be removed with the waste ; while the fibre that is long enough to reach across more than two meshes is blown through the trunk over the screen. This shows that my improvements effect what has never been done before, nor ever attempted, that I know of ; that is, a separation of the short fibres of cotton from the long before carding the cotton, which is a great advantage, as it saves a great deal of labor in the subsequent processes which would otherwise be required to gather up the short fibre when

it is thrown or falls off, so as to prevent it from accumulating and gathering on the machinery, and from being drawn into the work so as to derange it, Besides, the woven screen separates so much more of the fine dust and dirt from the cotton, that there is far less in the carding room than there would be if the wooden rods or perforated zinc were used ; and further, since the wire screen has been in use, it is found that it separates so much more of the dirt and sand from the cotton than anything previously used, that the cards will run nearly twice as long without grinding as they did before, and that fully one third of the labor of grinding the cards is saved with the expense of grinding materials, and also one third of the wear and tear of the card clothing. Lastly, goods made from cotton cleaned with the improved screen and cells present an appearance so much superior to others as to increase their value from five to eight per cent., and at the same time the cotton is worked with far less loss in waste than heretofore, so that it enables the manufacturer to make goods of a given quality, out of a far cheaper and inferior quality of raw material than he could do without my improvements. I believe I have described and represented the improvements in machinery or apparatus for cleaning cotton and other substances, which I have invented, so as to enable any person skilled in making and working cotton machinery to make, use, and operate said improvements. I will now state what I desire to secure by letters patent, to wit :

What I claim as my invention and improvement in a trunk for cleaning cotton and other substances is, dividing it horizontally or centrally with a screen of woven wire or twine, with cells or compartments under said screen so small as to prevent or break the current of air under said screen, substantially as described, in combination with a machine, substantially such as is described in this specification, or its equivalent, for opening the cotton and blowing it through said trunk over the screen, substantially as described. In testimony that the foregoing is a proper specification of my improvements in apparatus for cleaning cotton, etc., I have signed my name.

ISAAC HAYDEN.

Witnesses : J. Dennis, Jr.
J. F. Callan.

[Here follow 2 diagrams, marked Exhibit "C," No. 1 and 2.]

Filed 9th December, 1864.

Supreme Court of the United States.

No. 90.

The Suffolk Manufacturing Company

IN ERROR,

vs.

Isaac Hayden.

BRIEF FOR PLAINTIFF IN ERROR.

BOSTON:
PRINTED BY ALFRED MUDGE & SON, 34 SCHOOL STREET.
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BRIEF.

I.

INVALIDITY OF PATENT BY REASON OF HAYDEN'S PRIOR PATENT.

The patent of Hayden, marked Exhibit B., and dated June 15th, 1857, being the patent on which he went to the jury and obtained the verdict, is inoperative and void, and should have been so held at the trial, *because* the thing therein described and claimed was fully described but not claimed in Hayden's patent A. granted March 17th, 1857 (before patent B. was applied for), and was therefore by the legal operation of patent A. surrendered to public use (if it was the invention of Hayden) before patent B. was issued or applied for.

DESCRIPTION OF APPARATUS IN PATENT B.

The thing described and claimed in patent B. (on which the verdict was recovered), is an "improvement in elongated trunks for cleaning cotton,' etc. [fol. 10], consisting in "covering the partitions of *an* elongated trunk or box for cleaning cotton, etc., with woven wire, having the scores, formed by the weft crossing the warp of said wire screen, filled with metal or cement, the whole combined in the manner and for the purposes set forth" in the specification [fol. 14].

The "elongated trunk" to which the improvement relates is described as applicable "to such machines for beating, picking, scutching and opening cotton, wool, fur and other fibrous substances, as can be made to produce either a blast or suction with or without the aid of a fan to

assist in passing the substances operated on through the trunk over the screen" [fol. 12]. The particular trunk shown in the patent is described as having doors in the bottom for removing the waste matter, and doors also in the top.

The partitions are described as placed about six inches apart crosswise of the trunk, on the bottom, and in height about one-half of the height of the sides of the trunk [fols. 10, 12], and their purpose and operation are to form receptacles in which there is little or no current of air and in which the refuse matter precipitated from the fibres of the cotton as they pass along through the trunk may rest and remain until removed from below [fol. 12, 13].

The woven wire screen is described as fastened over or on the top edges of the partitions, and as best made of wire about number twenty-two, woven square, about one-eighth of an inch from centre to centre of the wires, or eight wires to the inch each way [fol. 11]. But the patentee says, "the wire or twine used in making the screen and the meshes formed in it may be of such dimensions as will adapt it to the purposes for which it is intended to be used" [fol. 13]. The described operation of the screen is that not only the sand, dirt, pieces of leaves and other refuse matter heavier than the cotton, but also those fibres of cotton, which are too short to reach across two meshes in the screen, pass through it into the spaces between the partitions [fol. 12].

The filling of the scores is described as accomplished by dipping the woven wire into melted metal (tin, or a composition of tin and lead), or by applying on one or both sides, with a brush, varnish made by dissolving gum shellac in alcohol, — the varnish being so applied as to fill all the scores in each direction; and any other kind of varnish or cement, which will answer the purpose, to be used at the option of the constructor [fols. 11, 12]. The described operation of the melted metal, or varnish, or cement, is "to prevent the fibres of cotton or other materials being passed over the screen, from catching and hanging in said scores" [fol. 10].

The trunk, the partitions, and the metal or cement, are combined by placing the partitions crosswise on the bottom of the trunk, covering them with the woven wire screen, and coating the scores of the screen so as to completely fill them with the metal or cement, the purpose being to form a screen floor through which the refuse matter will drop

out of the current of air into receptacles beneath, and which screen floor will permit the fibres of cotton to slip over it without hanging or catching as they are blown through the trunk.

DESCRIPTION OF APPARATUS IN PATENT **A.**

The same elements combined in the same way for the same purpose, and producing the same results, are fully described in the patent A, taken out by Hayden before he applied for patent B, on which the verdict was recovered.

The invention described in patent A. is "a new and useful apparatus to be applied to machines for cleaning and separating wool, cotton, fur and other fibrous substances." [Folio 2.]

The patentee says that the design and object of his apparatus, when applied to machines for cleansing, etc., is to "make the machine clean the cotton more perfectly by blowing or drawing it, *when* separated into very small flakes, or loose, open locks [by the cleaning and separating machine], through *a long trunk* provided with numerous *cross partitions on its bottom; these partitions and the spaces between them* being covered with a *wove wire screen or net* with open meshes large enough to allow the blast of air blown through the trunk to circulate freely through them, but so small that only the short fibres of cotton will be blown through, while the dirt, dust, sand and other refuse matter mixed with the cotton, which are heavier than the cotton, will fall through the meshes in the wove wire screen, and remain between the partitions until they are removed, while the cotton is blown through the trunk over the screen. After precipitating all extraneous matter which was mixed with it through the screen, it passes out of the trunk into the receptacle or devices prepared to receive it, being far better cleaned than it has ever been done before by any machine heretofore known [fols. 2, 3].

He proceeds to say that "the area of the trunk above the screen *may be* increased by making it larger towards the rear," etc. [fol. 3,] also that "the partitions in the trunk *may be* made wider, so as to make the spaces between them gradually deeper towards the end of the trunk," etc. [fol. 3.]

He describes the bottom and top of the trunk as made in sections removable for withdrawing the refuse matter [fol. 4].

He describes his apparatus as intended to be applied "to such machines for beating, picking, scutching and opening cotton, wool, fur and other fibrous substances, as can be made to produce either a blast or suction, with or without the aid of a fan to assist in passing the substances to be operated upon through the machine or apparatus" [fol. 7].

The trunk here described differs from that shown in the drawings of patent B. in so far as it shows not only *an elongated* trunk with top and bottom made in removable sections, but *superadds* the feature of *enlargement toward the rear end.*

The *partitions* (in patent A.) are described as "about one-half the width of the sides, placed about six inches apart, with their lower edges even with the lower edges of the sides [fol. 4], and their purpose and operation is that the refuse matter may fall through the screen into the spaces between the partitions, and there remain until they are removed [fol. 2, 3].

They differ from those shown in the drawings of patent B. only in *superadding* the feature of gradual enlargement of the spaces between the partitions towards the rear end of the trunk.

In patent A. the woven wire screen is described as fastened to the tops of the partitions so as entirely to cover the space between the sides of the trunk, and as made of wire about No. 22 so that the centres of the wires are about one-eighth of an inch apart in each direction [fols. 4, 5]. And the patentee says, "the wire used for making the screen and the meshes formed in it may be made of such dimensions as will adapt it to the purposes for which it is intended to be used" [fol. 7].

The described operation of the screen is the same as in patent B [fols. 2, 3].

The filling of the scores with "melted metal, varnish, or some kind of cement," and the purpose of so filling them are described at fols. 4, 5, almost *verbatim* as they are in patent B.

The manner of combining the trunk, partitions and metal, or varnish, or cement, is also the same as in patent B.

CLAIM OF PATENT **B.**

This claim is susceptible of two interpretations:

(1) The more obvious interpretation is, that it covers the combination of 1, an elongated trunk or box for cleaning cotton and other fibrous substances; 2, partitions dividing the lower horizontal section of such trunk into compartments; 3, woven wire screens extending lengthwise of the trunk, and resting upon the partitions; 4, metal or cement filling the scores of the screen.

(2) It may be interpreted as a combination of the above enumerated elements *with* an opening or beating machine capable of producing either a blast or a suction with or without the aid of a fan to assist in passing the cotton through the trunk over the screen.

Whether the one or the other of these interpretations be adopted, the claim of patent B. covers that which is fully *described* in patent A.

The parts claimed in combination in patent B. are found in the description of patent A. constructed, combined and operating in the same way.

This is true although the claim of patent B. be construed to embrace as an element of its combination only such a trunk as is shown in its drawings, viz.: a trunk *not* widened towards the rear end. Because

(1.) The description of patent A. plainly includes two forms of trunks, one which is widened at the rear end, and another which is not; the *widening* being stated merely as an optional or perhaps preferable form of construction.

(2.) The trunk of uniform depth and width being found described in patent A. it is immaterial that a modification of that form is also described.

(3.) If the patent A. contained no description or suggestion of any but widened trunks, it would still contain substantially the trunk claimed in patent B. (supposing that patent to cover a straight trunk only), because the widened trunk in combination with the opening machine, and the partitions and screen and metal or cement performs exactly the same office in exactly the same way, and the uses of the two trunks respectively are not only analogous but identical.

Horton *vs.* Mahon, 12 C. B. (N. S.) 437.
Brooks *vs.* Aston, 8 Ell. & Bl. 478; 1 Ell. & Ell. 1102.
Rallston *vs.* Smith, 9 C. B. (N. S.) 117.
Beley *vs.* Holden, 8 C. B. (N. S.) 666.
Harwood *vs.* The Great Northern R. R. Co. 8 Jurist (N. S.), 1120.
Bean *vs.* Smallwood, 2 Story, 411.
Hotchkiss *vs.* Greenwood, 11 Howard, 248.

But the claim of patent B. does *not* exclude the widened trunk and partitions. It covers as an element of its combination *an* elongated trunk, etc.; that is to say, any known elongated trunk capable of useful employment in the same combination in the same way and for the same purpose. The limitation, in the claim, to the preceding description, relates only to the manner and purpose of combining the before described elements.

Doubtless, a defendant using the apparatus described in patent B. with a *widened* trunk would be held to infringe the patent. And if the patent B. includes a widened trunk for purposes of the question of infringement, it includes it for the purposes of the present question.

CLAIM OF PATENT **A.**

This improvement of filling the scores by varnishing, etc., the screen is not claimed as a distinct feature of the monopoly intended to be secured by the patent A. and if embraced at all by the second claim, is adopted by implication only from the words "substantially as described for the purposes set forth," and if adopted by such implication, the claim confines the monopoly to the use of varnishing, etc., in wire screens when inserted and used in such a widened trunk as is described and claimed in the patent.

The result of the foregoing comparison of patents A. and B. is submitted to be that the subject matter of patent B. is described but not claimed in patent A.

This being so, we submit that by operation of patent A. said subject matter was surrendered to public use (saving the right of re-issue) and that the subsequent and independent patent B. taken for said subject matter, is void; and for the following reasons:

1. The right so to take a subsequent independent patent gives a patentee the right to *extend his term of protection unlawfully.*

An inventor lodges at the Patent Office a model and drawings and description of a certain apparatus comprising various features, some new, some old. Of *two* new and patentable features which he describes he claims only *one.*

Now, if he may afterwards take an independent patent for the other, he virtually protracts his protection beyond the period allowed by law.

For although he in such case does not hold a *claim* for more than the period allowed by law, yet his first description, containing, as it does, a feature which, being new and patentable, he *may,* when he pleases, claim, deters the public from engaging in any manufacture embracing that feature, lest they be stopped at a future day, if he pleases to take a re-issue and stop them.

This state of things may continue so long as the patentee can practically enjoy a monopoly of the feature which he has so described and not claimed, and this may be a longer or shorter period, according to the nature of the business to which such feature is applicable.

Suppose a patentee to shew in his description a general mode of construction, and also a subordinate *improvement* in one feature, giving the machine a special value,—

So long as he, holding his claim to his general mode of construction, can control the manufacture, he need not take a claim for the special improvement. Sooner or later, whenever he finds it expedient, he may introduce the special improvement into his manufacture, and *two years after that* he may take a patent for that special improvement.

Clearly he may thus *by management* extend his monopoly much beyond the term allowed by law, *without any new act of invention.*

2. The right so to take a subsequent independent patent is *incompatible with the statute rights of assignees.*

Suppose the original patent, containing two features described and but one claimed, passes to an assignee,—

The assignee has a statute right to re-issue that patent and cover both features.

Act of 1836, § 13.
Woodworth *vs.* Stone, 3 Story, 750.
McBurney *vs.* Goodyear, 11 Cush. 569.

Now, if the assignor has also a statute right to secure the second one of those two features by a subsequent patent, there are two parties entitled to separate patents for the same thing.

The right of the assignee to secure to himself the unclaimed feature, is a *continuing* right, co-extensive in duration with the term of the original patent which he has bought, and no other man can have a right at any time during that term to appropriate such unclaimed feature to himself.

3. The right so to take a subsequent independent patent is *in derogation of the right of the public, acquired by the grant of the first patent, to practise the invention as there described.*

A specification is a statement of the invention or discovery and of the manner of making, constructing, and using the same.

The contract between the patentee and the government is, that in consideration of his being protected in the exclusive enjoyment of his invention for a term of years, the public shall, after the expiration of that term, have the right to use the invention *in the manner he has described in his specification.*

If at any time after taking his original patent he may take an independent patent for a full term, covering part of *the manner of constructing and using described in the first patent,* he thereby prevents the public from that full and beneficial enjoyment of the subject of the first

patent from and after its expiration, which was the condition upon which that patent was granted to him.

4. The right so to take a subsequent independent patent is *excluded by the language of the Acts of Congress giving to the Commissioner the power to grant original patents.*

There is no exclusive right to inventions, which the Court has jurisdiction to enforce, except that which the Acts of Congress confer.

If it does not appear from these Acts that the Commissioner may grant one original patent for one part of what is described, modelled and drawn by the applicant, and may afterwards grant another and independent patent for another part, and so on, the Court cannot affirm the judgment in this case.

These Acts of Congress require the inventor to lodge a model and drawings and description showing his invention and the manner of making, constructing and using it. He must also describe the several modes in which he has contemplated using it. He must furnish such information as will enable skilful artisans in that department of industry to make and use the invention. Having done this, he must "particularly specify and point out the part, improvement or combination which he claims as his own invention or discovery."

Act of 1836. Section 6.

He is not bound to describe any more than is necessary to make, construct and use the invention. He may take his patent for as little as he pleases and may describe, model and draw no more than is necessary to make, construct and use *that little.*

But of that which he does so describe and model and draw, he must *particularly specify what he claims as new.*

The *purpose* is twofold; 1, that when the term has expired and the invention has become public property, the public may have at the Patent

Office the knowledge of the best way of practising the invention, and 2, that during the term, the public may know just what the patentee claims and what they are prohibited from using.

Parker *vs.* Stiles, 5 McLean, 55.
Brooks *vs.* Bicknell, 3 McLean, 441.
Evans *vs.* Eaton, 3 Wash., 453.
S. C., 7 Wheat., 434.

When the patentee states what part of the thing described he does claim, it is saying in effect that the remainder he does not claim.

He makes a voluntary communication to the public of certain things, and by declaring that he claims as his own only some of them, he surrenders to public use the remainder, except as he may be relieved by the law of re-issue.

Battin *vs.* Taggart, 2 Wallace, Jr., 101, S. C., 17 Howard, 74.
Smith *vs.* Ely, 5 McLean. 87, 88.
Odiorne *vs.* Amesbury Nail Factory, 2 Mason, 31.
Morris *vs.* Huntington, 1 Paine, 349.
Dixon *vs.* Mayer, 4 Wash, 73.
Langdon *vs.* De Groot, 1 Paine, 207.

5. The right so to take a subsequent independent patent *is implicitly denied by the provisions relating to re-issues.*

The re-issue law (1836, section 13) provides that whenever a patent is inoperative by reason of a defective or insufficient specification, the Commissioner may re-issue the patent upon a specification so amended as to secure the whole invention to the applicant, *provided*, 1st, that the error arose by "inadvertency, accident or mistake, and without any fraudulent or deceptive intention," 2d, that the re-issue shall have effect only for the residue of the original term.

It cannot be that the 6th and 7th sections of the same act, which give the Commissioner all the power he possesses to grant original patents, are to be so construed as to permit him to grant an original patent of

fourteen years for a part of the same invention which was previously described but not claimed, and that, without its appearing that the omission to claim it in the first instances was by inadvertence, accident, or mistake.

6. The right so to take a subsequent independent patent *makes the law of re-issue nugatory.*

That law is expressly made for the purpose of making his patent operative to secure to him the whole of that which was really new with him in the thing modelled, drawn, and described; and where a statute prescribes a peculiar remedy, that alone can be resorted to.

2 Saund. Pl. & Evid. 1012 and cases cited.
Gregory *vs.* Des Anges, 3 Bing. N. R. 85.
Alborne *vs.* Pyke, 3 Town. R. 444.
Newton *vs.* Holford, 6 C. B. 926.

Upon the face of the specification of patent A. it is plain that Hayden might have taken, in that patent, besides the limited claims there found, 1, a claim to an elongated trunk having cross partitions covered by woven wire screens — whether widened at the rear or not — if it was new: 2, a claim to a woven wire screen having the scores filled with metal, etc., — whether used with a trunk and partitions widened at the rear or not, — if it was new.

Wilson *vs.* Rousseau, 4 How. 670, 686.
Hogg *vs.* Emerson, 6 How. 483.
S. C. 11 How. 587, 605.
Wyeth *vs.* Stone, 1 Story R. 288.

7. *There is no question of abandonment in fact, to be tried by a jury.*

There are but three cases which can be supposed of a patentee's omitting to claim a new thing which he has described.

1. That he omitted it by inadvertence, accident and mistake, and without any fraudulent or deceptive intention.

For such case the law provides re-issue, and by implication excludes any other remedy.

2. That he omitted it intentionally, with a purpose to claim it by an independent patent afterwards.

This is that "fraudulent and deceptive intention" which the re-issue law mentions, and which, if found to exist, debars him from re-issue for the remaining term; *a fortiori*, from a new patent for a full term.

3. That he omitted it intentionally without any purpose to claim it afterwards.

This is necessarily a surrender of it to the public use.

There can be but these three states of fact — the character and consequences of each are *matters of law.*

II.

INVALIDITY OF PATENT BY REASON OF HAYDEN'S SUBSEQUENT PATENT.

The court below rightly decided that patent C. (applied for Dec. 11th, 1854, and granted Sept. 11th, 1860) embraced what was already covered by patent B. (assuming that patent to be for the combination of varnished screen, trunk and partitions with the opening, etc., machine,)

and, that being so, should have ruled that patent B. was inoperative and void by reason of the legal effect of patent C.

(1) Because the action being brought upon both these patents B. and C. and it appearing that they both claimed the same thing, and the patent C. having never been surrendered, the policy of the patent laws forbids the enforcing of *either of them.*

(2) Particularly in the present case, it is submitted that the patent C. in so far as it contains the same thing which is claimed in patent B. must, if either be valid, be held to be the valid one of the two: because it was properly applied for Dec. 11th, 1854, and that application was never withdrawn; and, pending that application, the Commissioner had no power to entertain any other application by the same person for another patent for the same thing, but such other application and all proceedings under it must be held to be irregular, unlawful and void.

III.

DAMAGES.

It did appear in evidence, and is an obvious necessity of the case from the nature of the invention, that the plaintiff derived his advantage of monopoly from granting licenses to use.

As regarded the *making* of the trunks, there was no evidence offered by plaintiff to show that he ever *made* any himself, or at what prices they could be sold, and consequently no evidence of *any* damage by defendant's *making.*

As to defendant's using, it was not true that "from the peculiar circumstances of the case, no other rule could be found" than the defendant's profits — *which* therefore did not become the criterion of the plaintiff's loss.

Seymour *vs.* McCormick, 16 Howard, 490.

There was evidence for the jury to consider, whether or not the plaintiff had fixed a rate of licensing the use of his invention, and the Court should have therefore given the ruling asked for in the defendant's first prayer on damages [fol. 28]. It was error to instruct them to consider, *with that*, the value of the invention, or, in other words, the profits of the defendants.

It was error to instruct them [fol. 30] that the price fixed by reference in two cases, as testified by the witness Oliver, was *not to be taken* as price which Hayden fixes for using his invention, because not satisfactory to Hayden.

It was for the jury to say whether it was in fact the standard price of Hayden.

The burden was upon the plaintiff to show his damages. It appeared that his custom was to grant licenses. He was bound to *show* "the loss which he had sustained in being deprived of an opportunity of agreeing with the defendants on a voluntary sale." The second prayer of defendants [fol. 28] should have been granted.

But if the question of defendant's profits could properly enter at all into the question what was a proper license fee to charge them, the evidence of value observed in the use of the invention in *other* mills was immaterial and misleading, and should have been excluded.

If evidence of value observed in the use of the invention was admissible, it should have been limited to the question what value was observed in long trunks with partitions and varnished wire screen, as claimed in the patent, over and above the value observed in the widened long trunks and partitions with unvarnished screen claimed in the prior patent, A.

It was error to give the jury such instructions as would permit them to find by their verdict as damages under patent B. above the value of all "the practical benefits, if any, of using Hayden's improvements in cotton-cleaning, as described in his patents, over and above the old machinery for cleaning cotton."

In Pl's Com C. Cushing
C Brown

Supreme Court of the United States.

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Jno. Ryan Com. C. Century
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BRIEF OF DEFENDANT IN ERROR.

The defendant in error, who was plaintiff in the Court below, declared in his first count, on letters patent, which are designated in the Bill of Exceptions as Patent B.; and in his second count on letters patent, designated in the Bill of Exceptions as Patent C.

At the trial, Patent C. was withdrawn from the case, and the verdict was rendered on Patent B. only.

The first question which arises on the bill of exceptions respects the validity of Patent B.

The material facts are,—that *on the eleventh day of December*, 1854, the plaintiff, being the original and first inventor of new and useful improvements in *Cotton Cleaners*, made application to the Commissioner for letters patent therefor.

The nature of these improvements may be characterized as consisting in certain described changes made by Hayden in the interior arrangements of an elongated trunk previously in use for cleaning cotton.

While this application of December 11, 1854, *was still pending*, Hayden made another distinct improvement, not in the interior

arrangements of the elongated trunk, but in the *form* of the trunk. This improvement consisted in increasing, towards the rear end of the trunk, that part of its area above the screen, (which divided it horizontally into two distinct parts,) so that as the air moved through the trunk towards its rear, the space for its passage being enlarged, the air would move gradually slower.

Hayden desired to claim this new improvement in the form of the trunk, both separately, *and in combination with his other improvements in the interior arrangements of the trunk*, as to which his application was then pending; and accordingly, November 1st, 1855, he filed his application for letters patent, and on the 17th day of March, 1857, letters patent (designated in the bill of exceptions as patent A.), were issued to him, in the specification whereof he claims the improvement in *the form of the trunk*, both separately, and in combination with his improvements in the interior arrangements of the trunk; but he makes no claim in this specification to his improvements in the interior arrangements of the trunk, because an application for letters patent for those interior arrangements had been pending before the commissioner ever since the 11th of December, 1854.

This patent A is in supplemental record, pp. 1–4.

It did not appear at the trial, nor was it asserted by the defendants, that Hayden was guilty of any laches, or was in any default whatever in reference to the delay of the Commissioner to act on his first application for letters patent for improvements in the interior arrangements of the trunk made December 11, 1854. But for some cause, the Commissioner had not acted on that application down to the 15th of June, 1857; and on that day Hayden made another application, for letters patent, for what the judge at the trial, *at the request of the defendants*, ruled to be the same improvements, previously applied for on the 11th of December, 1854; and upon this second application

the letters patent (B.) were granted, bearing date December 1, 1857, being the same declared on in the first count of the declaration, and on which the verdict for the plaintiff was found. (This patent is in supplemental record, pp. 4–7.)

At the trial, the defendants' counsel requested the judge to rule that patent B. is inoperative and void, because the improvements in the interior arrangements of the trunk, which are described and claimed in patent B. being also described and *not* claimed in patent A. *by the legal operation of patent A. were surrendered to the public use.*

The judge refused so to rule and this refusal raises the first question.

I. The defendants are to be confined to the specific question, whether Hayden, *by the legal operation of patent A. did surrender to the public use,* what is described and claimed in patent B.

Brooks *vs* Marbury, 11 Whea. 78.
Cotts *vs.* Phalen, 2 How. 376.

II. Having made an invention in the interior arrangements of the trunk, and duly applied for a patent therefor, and having subsequently made an invention in the form of the trunk, capable of being usefully employed either separately from or in combination with his first invention, Hayden had the right to a patent, covering both the separate and the combined use of his improvements in the *form* of the trunk.

III. To apply for and obtain such letters patent, he was compelled to *describe* his earlier invention, in combination with which his second invention was claimed.

IV. Hayden had no control over the order in which the respective letters patent would be issued by the Commissioner, or the time when either would be granted.

V. The request for instruction excludes all fault on the part of Hayden, and all control by him of the order or dates of his patents, and all manifestations of his intent, and the necessity he was under to describe his improvements in the interior arrangements of the trunk; and rests wholly on the mere legal operation of the fact that the Commissioner first issued patent A.

VI. The request for instructions makes the act of the commissioner, in issuing patent A. before he issued letters patent for the other improvements, not only fatal to Patent B. but to *any letters patent for that improvement.*

Hayden could not surrender Patent A. and claim the improvements in the interior arrangements of the trunk separately, so as to cover what is patented in Patent B.

1st. Because it is manifest he did not fail to claim these in Patent A., *from inadvertence, accident, or mistake.* He did not claim them in Patent A. because he had all the time on file in the office an application for distinct letters patent therefor.

Burr *vs.* Duryea, 1 Wallace, 531.

2d. The ability of Hayden to surrender Patent A., and obtain a re-issue covering the subjects of both A. and B., involves matter of fact, excluded by the request for instructions; which was not that Patent B. was void *if a case existed for the surrender of Patent A.*, but that Patent B. was void by the legal operation of A. without limitation or qualification.

VII. Patent B. bears date December 1, 1857; Patent A., March 17, 1857; less than nine months previously. If, at the date of Patent A., the subject matter of B. had been described in every scientific magazine in the world, and had been in public use and on sale, with the consent of the patentee, this would not have been *by mere operation of law* a surrender of the invention to public use, on or before the date of Patent B. It would

still have been necessary to prove the intention of the inventor to abandon his invention to the public.

Act of March 3, 1839, sec. 7.

Why should a description which the patentee was obliged to insert in Patent A, to secure his rights, be deemed an abandonment by mere operation of law, when he actually had pending before the Commissioner an application for letters patent for the thing supposed to be abandoned?

VIII. That Patent B. was not in fact issued upon the original application for its subject matter, made December 11, 1854, but upon an application made June 15, 1857; and that the Commissioner afterwards issued another Patent, C., which covered the subject matter of Patent B., is of no importance in reference to this question whether Patent B. was void by the mere legal operation of Patent A.

Doubtless both Hayden and the Commissioner believed that Patent C. did not cover the same subject matter as Patent B., or it would not have been so issued.

But the defendants at the trial requested the judge to rule, and he did rule, that patent C. embraces what was already covered by patent B., and of course they are bound by that ruling. Now the application covering the subject matter of patent C., and therefore, according to the ruling, covering the subject matter of patent B. was on file continuously from December 11th 1854. Why letters patent were not issued upon it does not appear; and the defendants are, as has been shown, in no condition to suggest to this court, that Hayden was in any fault for the delay. All that appears is that the office failed to issue letters patent upon an application which Hayden was entitled to have granted. In this state of facts, he applied a second time, viz., June 15, 1857, for the same thing; and patent

B. was issued for that thing. In point of fact he always, after December 11, 1854, had an application pending *for that thing*.

And the new petition which he filed for the same thing, June 15, 1857, though an unnecessary act, was clearly a part of the same transaction, and the two constitute one continuous application for that thing down to the date of Patent B.; and there was no error whatever in issuing Patent B.

It is true, if the ruling of the judge at the trial, made at the defendant's request, was correct, that the subject matter of Patent C. includes the subject matter of Patent B., Patent C. ought not to have been afterwards issued. But this in no way affects Patent B.; and as Patent C., though declared on in the second count, was withdrawn from the jury, its invalidity is of no importance.

Finally, it is submitted that the description of a thing not claimed in a specification *does not amount to an abandonment by mere operation of law.* By such description the thing becomes known to the public by the consent and allowance of the patentee from the date of the patent. Whether such consent and allowance amount to an abandonment of the thing described, to the public, cannot be determined without taking into view other facts. If this public knowledge, with the consent and allowance of the patentee, existed more than two years before his subsequent application for a patent, and it is not a case for a surrender of the patent in which the thing was described, then, and *then only*, is there an abandonment of the invention to the public by mere operation of law.

In the case at bar, when the description in Patent A., of the subject of Patent B., first came before the public (March 17, 1857), an application for the subject of Patent B. had been pending more than two years before the Commissioner; the renewed application for the subject of Patent B. was made

within three months afterwards (June 15, 1857); and Patent B. itself was issued December 1, 1857, within nine months after Patent A. What pretence can there be, in such a case, of an abandonment by *mere operation of law?*

The refusal to instruct that Patent B. was made void by Patent C., was correct. C. was void, if it covered *only* the subject of B. (which was not alleged); otherwise it was void *pro tanto*—but it did not affect Patent B.

In reference to damages:

The first exception cannot be sustained. It assumes that if the patentee sells licenses, the price of a license to use a thing of *little* utility will be as much as the price of a license to use a thing of *great* utility, which is evidently false.

The second exception assumes that it was not material to the question of damages, *to what extent* the defendants had unlawfully used the plaintiff's invention.

The first prayer for instructions was inapplicable to the case. There was no evidence which would have warranted the jury to find that the plaintiff had, at the date of his writ, any fixed or average price for a license to use his improvements.

The second prayer was also, in part, not applicable to the case; there being no evidence to warrant the jury in finding dealings with other manufacturers which could afford any standard or criterion of damages. And in the instructions actually given, the jury were told to allow to this evidence such weight as it deserved in ascertaining the actual amount of the damage sustained by the plaintiff.

The learned judge's instructions to the jury were full and correct, and he was not bound to follow the prayers of the defendant's counsel, or to modify them to suit the case.

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Of Counsel with Defendant in Error.